

Science Overview Whole School

Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Animals including Humans <ul style="list-style-type: none">To name a variety of common animals and identify their key featuresTo name the basic parts of the human body and know which sense relates to which part of the bodyObserve closelyAsk questions and recognise that they can be answered in different waysGather and record dataPerform simple tests		Materials <ul style="list-style-type: none">To identify and name some common, everyday materials and describe their physical propertiesClassify materials according to simple propertiesAsk and answer simple questionsPerform simple tests		Plants <ul style="list-style-type: none">Name some common plants, flowers and trees and compareTo name the different parts of a plantGather information and record dataObserve closelyIdentify and classify according to simple observable features	
	Seasonal Changes <ul style="list-style-type: none">Observe some of the changes that take place over the course of the year					
Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Animals including Humans <ul style="list-style-type: none">Know that animals, including humans have offspringKnow the basic needs of animalsKnow that animals need food, exercise and hygiene to be healthyKnow basic safety linked to medicineUse secondary sources or observation to answer questionsSuggest ways in which questions can be answered	Materials <ul style="list-style-type: none">Name a variety of different common materials and describe their propertiesGive examples of how some common materials are used and suggest why these are chosen for a purposeSuggest a material that a new object can be made from due to its propertiesDescribe how the shape of some solid objects can be changedName some everyday materials that have been inventedObserve closelyIdentify and classifyPerform simple tests		Living things and their habitats <ul style="list-style-type: none">To know things can be living or have lived, or have never been aliveTo understand what a habit and microhabitat are, and can name some animals that live in theseUnderstand how animals and plants depend on each otherTo understand basic food chainsGather and record dataAsk simple questions and perform simple testsMake careful observations and ideas to suggest answers to questions and answer in different waysIdentify and classify		Plants <ul style="list-style-type: none">Know what a seed is and that it grows into a new plantTo know what a bulb is and that it grows into a plantKnow that plants need water and a suitable temperature to germinateKnow that plants need water, light and a suitable temperature to stay healthyGather and record dataAsk simple questions and perform simple testsMake careful observations, identify and classify

Year 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Light and Dark <ul style="list-style-type: none"> ● To know that darkness is absence of light ● To know that light is reflected from different surfaces and that is why we see them ● To know that the sun can harm our eyes if we look directly at it ● To know how shadows are formed ● To know how and why shadows change ● To be able to make careful observations ● Make predictions ● Set up simple practical enquiries ● Ask relevant questions ● Record findings effectively 	Rocks and soils <ul style="list-style-type: none"> ● To know the 3 different types of rock ● To know that soil is made from different types of matter and know how it is formed ● To know the difference between a bone and a fossil ● To understand Mary Anning's contribution to palaeontology ● To compare, contrast and classify on the basis of particular features ● To make careful and systematic observations ● To set up simple investigation and present findings in a scientific manner 	Forces <ul style="list-style-type: none"> ● To compare how objects move over different surfaces ● To know that some forces need contact between 2 surfaces and some can act at a distance ● To know what the terms magnetic poles means ● To predict when magnets will attract and repel ● To know some materials that will be attracted to a magnet ● To identify similarities and differences between forces ● To set up simple , practical enquiries ● To draw simple conclusions from findings and present results 	Human Body <ul style="list-style-type: none"> ● To identify and use the scientific name for the main body parts ● To know that humans and some other animals have skeletons and muscles for support, movement and protection ● To describe the way in which the skeletons of other animals provide support, movement and protection ● To know that animals need the right amount and type of nutrition ● To know that animals cannot make their own food. ● Identify and classify eg animals according to their skeleton ● Set up a simple enquiry and record and present findings 	Plants <ul style="list-style-type: none"> ● To identify different parts of a plant and describe their function ● To explore the requirements of plants for life and growth and how they vary from plant to plant ● To understand the way in which water is transported in plants ● To explain the process of pollination and how seeds are formed and dispersed ● Ask relevant questions ● Make careful observations ● Report findings in different ways ● Set up a practical enquiry 	

Year 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	States of matter <ul style="list-style-type: none"> ● To explore a variety of everyday materials and group them according to their characteristics ● To observe a range of everyday solids, liquids and gases ● To observe changes to materials when heated or cooled ● To know that different materials change state at different temperatures ● To explain the water cycle process in terms of changes in matter ● To group and classify a range of different materials according to their properties ● To explore the effect of temperature, observing and recording their findings 	Sound <ul style="list-style-type: none"> ● To explain in simple terms that sound is made through vibrations ● To explain the difference between pitch and volume in terms of how this is made ● To know how pitch and volume can be changed ● To ask relevant questions and use different types of enquiry to answer them ● To make careful and systematic observations ● Report on findings from investigations including through oral and written explanations ● To identify differences, similarities and changes related to scientific ideas and processes 	Electricity <ul style="list-style-type: none"> ● To identify common appliances that run on electricity ● To make a simple series circuit, identifying and naming the basic component parts ● To identify whether a circuit will work and 'debug' simple series circuits ● To recognise simple conductors and insulators and associate metals with being good conductors of electricity ● To describe in simple terms how a switch works in a circuit ● To observe and identify patterns in results ● To plan and carry out a simple test and record findings 		Living things and their habitats <ul style="list-style-type: none"> ● To use the local environment to raise and answer questions about living things ● To observe how a range of habitats change over time ● To explore different ways of grouping a selection of living things ● To recognise the impact (both positive and negative) that humans and environmental changes have of different habitats ● Grouping, sorting and classifying according to self constructed criteria and those of others ● To raise questions and consider how to find the answers to these ● Making systematic observations ● Record and evaluate findings ● To gather, record, classify and present data in a variety of ways. 	Digestion <ul style="list-style-type: none"> ● To identify parts of the human digestive system and explain their function ● To know and describe the differences between and purposes of different types of human teeth ● To know how and why the teeth of carnivores and herbivores differ ● To know that food chains and food webs exist within a habitat and describe some of these ● Ask relevant questions and find the answers in different ways ● Gather evidence and record findings ● Identify similarities, differences and changes related to different scientific ideas